for cross-correlating said transmitted signals and said trinary sequence.

2. The system of claim 1, wherein said bipolar code sequence is a maximal length (ML) sequence.

3. The system of claim 2, wherein said bipolar code sequence is a phase shift keyed (PSK) signal.

4. In a direct sequence spread spectrum code division multiplex system including a plurality of transmitters synchronized to a common timing signal and each transmitting a signal spread by a bipolar pseudo-random code which is a different assigned shift of a common bipolar code sequence:

a receiver synchronized to said timing signal for receiving said transmitted signal spread by a bipolar pseudo-random code having a predetermined assigned code sequence shift, including means for generating a first bipolar pseudo-random code that is a replica of the transmitted common bipolar pseudo-random code and has the predetermined assigned code sequence shift, means for generating a second bipolar pseudo-random code that is a replica of the transmitted common bipolar pseudo-random code and has an unassigned code sequence shift, means for processing said first and second bipolar pseudo-random codes to obtain a trinary sequence and means for cross-correlating said transmitted signal and said trinary sequence.

5. In a direct sequence spread spectrum code division multiplex system comprising:

a timing signal source;

a plurality of transmitters synchronized to the timing signal source and each transmitting a data signal spread by common bipolar pseudo-random code which is a different assigned shift of a common bipolar pseudo-random code sequence; and

a receiver synchronized to the timing signal source for receiving said transmitted bipolar pseudo-random code having a predetermined assigned code sequence shift:

a method of synchronizing the receiver to a predetermined one of said transmitters transmitting a data signal spread by the bipolar pseudo-random code having said predetermined assigned code sequence, comprising the steps of generating a first bipolar pseudo-random code that is a replica of the transmitted bipolar pseudo-random code having said predetermined assigned code sequence shift; generating a second bipolar pseudo-random code that is a replica of the transmitted bipolar pseudo-random code having an unassigned code sequence shift; processing said first and second bipolar pseudo-random codes to obtain a trinary sequence; cross-correlating said transmitted binary psueod-random codes and said trinary code sequence; and in response, generating a receiver timing signal.

6. The method of claim 5, wherein said processing step includes a subtraction.

7. The method of claim 5, wherein said binary code sequence is a maximal length (ML) sequence.

8. The method of claim 5, wherein said binary code sequence is a phase shift keyed (PSK) signal.

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